



Notifying Doorbell with PushingBox

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PARTS:

- [Arduino or clone \(1\)](#)

SUMMARY

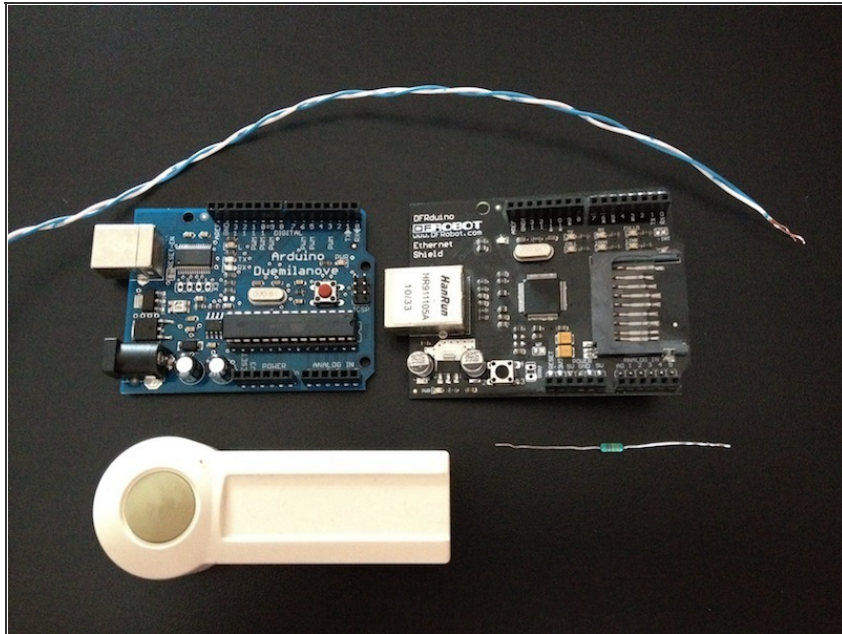
This project will help you to hack your doorbell to send Push notification and an email with an attached picture when somebody's at the door. It use the free PushingBox service to delegate all the programming part and make things easy.

Step 1 — Notifying Doorbell with PushingBox



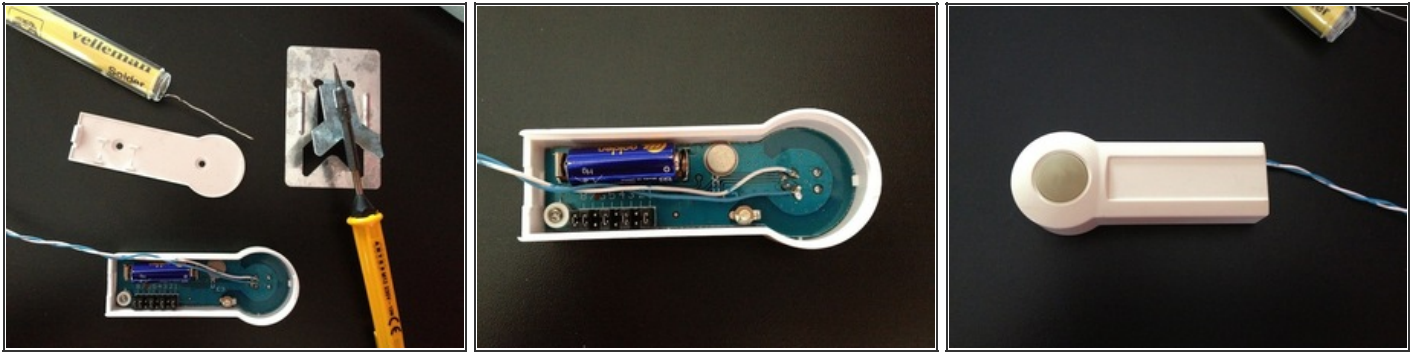
- How does it work ?
 - 1. When the doorbell is pushed, the Arduino sends an HTTP request to the PushingBox API.
 - 2. PushingBox launches the user's scenario and gets a picture from the web camera.
 - 3. PushingBox sends a Push notification to the user's phone and a mail message with the picture attached.

Step 2



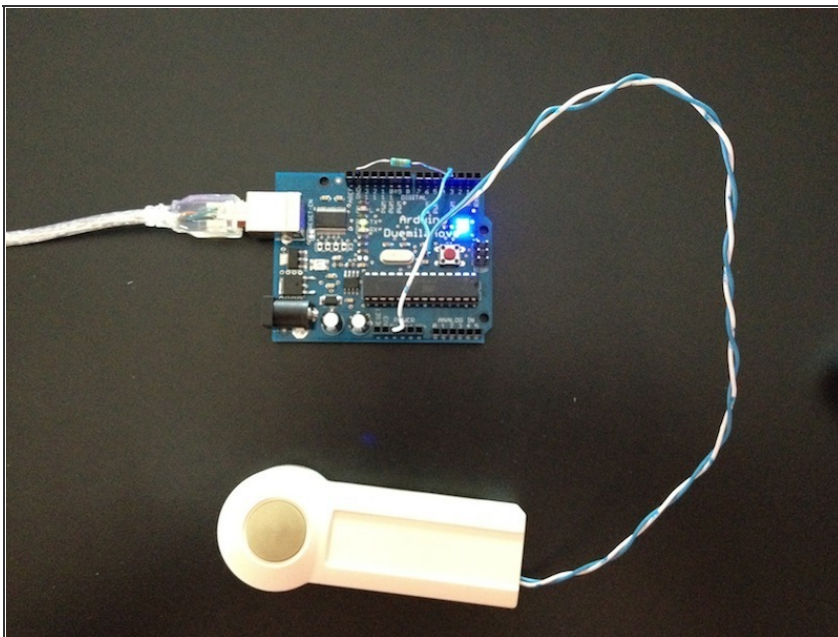
- Prepare your material. You need:
 - An Arduino + Ethernet Shield
 - A Doorbell
 - A soldering iron
 - A 10K resistor
 - A web camera (optional)

Step 3



- Open your doorbell.
- Solder wires to the button's terminals.
- Close the doorbell.

Step 4



- Plug the wires into the Arduino.
 - One wire on the 5v pin;
 - One wire on the 3rd input pin;
 - The 10K resistor between GND and the 3rd pin.

Step 5

```

DigitalReadSerial S
/*
  DigitalReadSerial
  Reads a digital input on pin 2, prints the result to the s

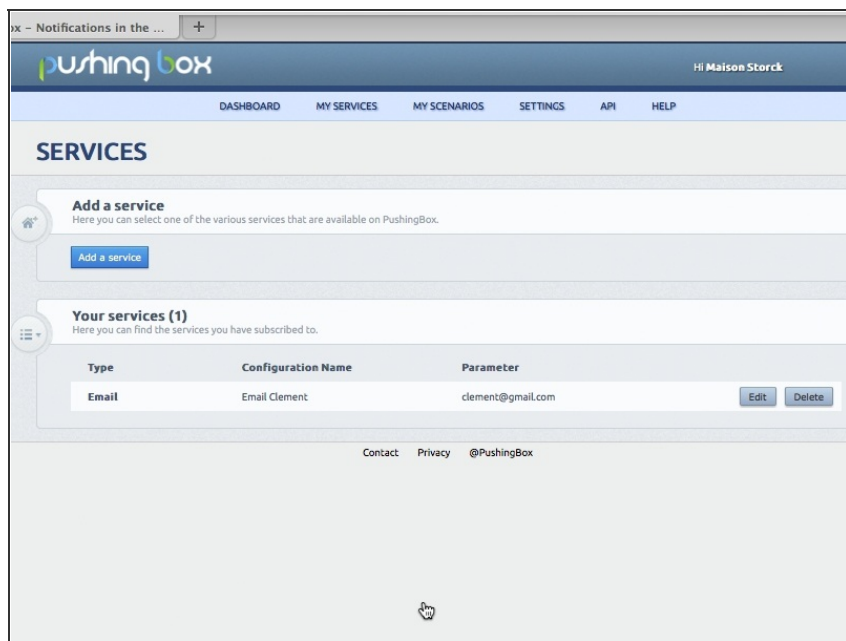
  This example code is in the public domain.
  */

void setup() {
  Serial.begin(9600);
  pinMode(3, INPUT);
}

void loop() {
  int sensorValue = digitalRead(2);
  Serial.println(sensorValue);
  delay(100);
}
    
```

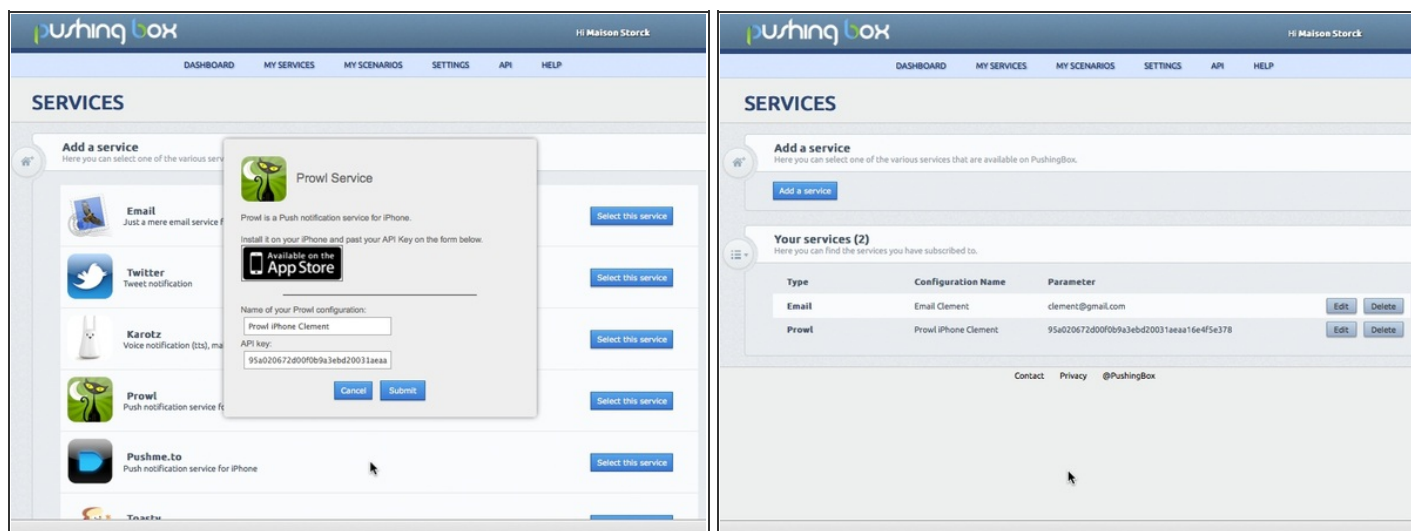
- Test the connectivity with a simple Arduino program.

Step 6



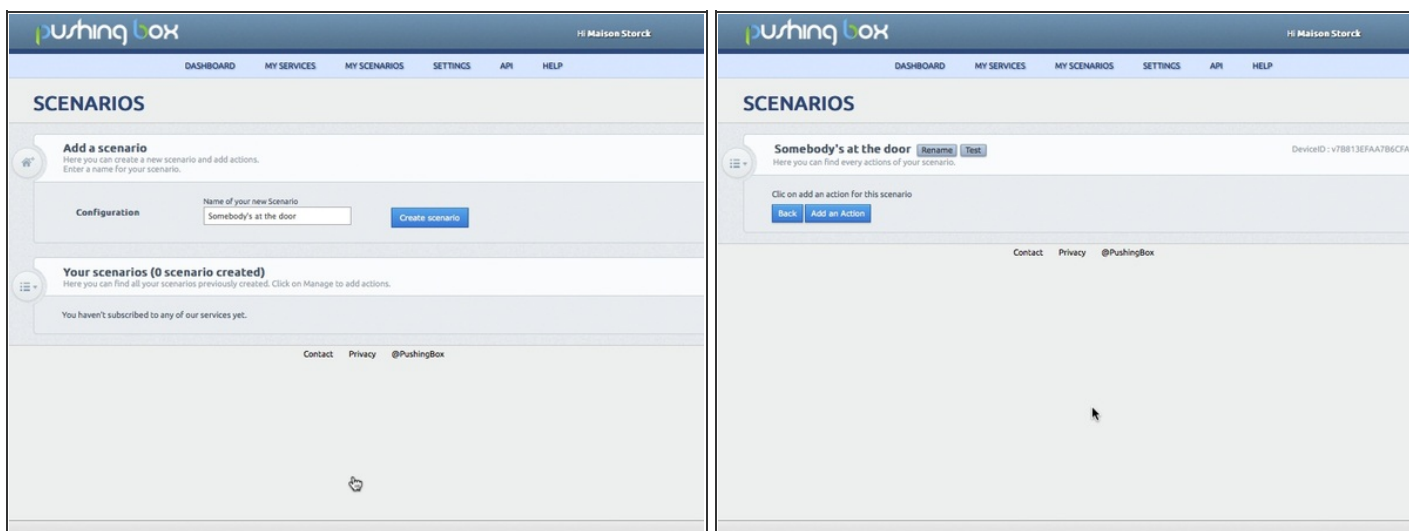
- The hardware part is finished. Let's define the way you will be notified.
- Go to <http://www.pushingbox.com>.
 - Login with your Google account.
 - Go to the **My Services** page.
 - Click on **Add a service**.

Step 7



- Click on the service by which you want be notified.
 - Use **Prowl** or **Pushme.to** for iPhone Push notification;
 - **Notifry** for Android Push notification;
 - **Toasty** for Windows Phone Push notification.
- Enter the name of your new service and fill in the API that this application gave you when you installed it.
- Click **Submit**.

Step 8



- Now, go to the **My Scenarios** page.
- Create a scenario called "Somebody's at the door".
- Click on **Create scenario**.
- Click on **Add an Action**.

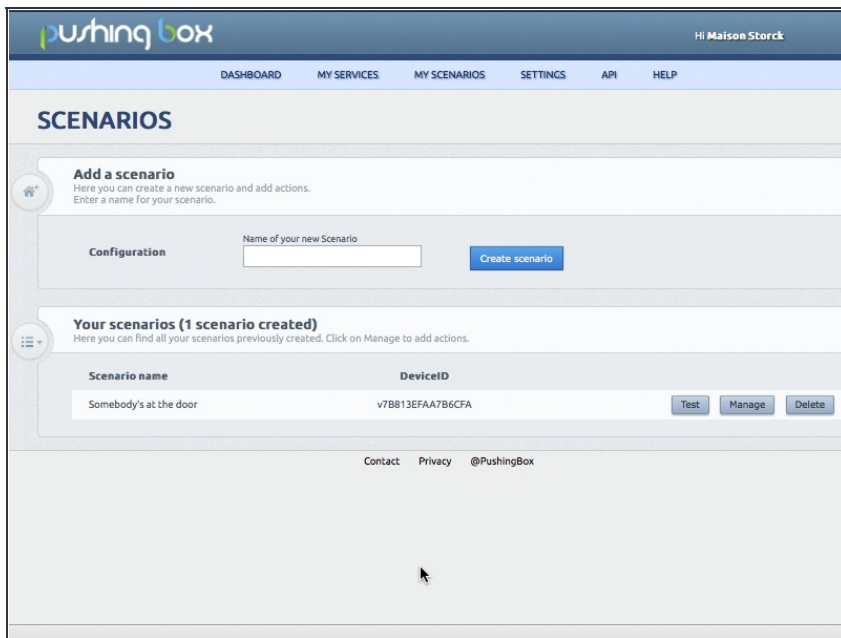
Step 9



- First, add an action using the Email Service.
- Fill in the mail Subject and the Body.
- The third field is optional and is for attaching a shot from your IP camera to the email. Fill in the URL (publicly reachable) of your web camera. The camera's output must be a picture less than 100KB in size.
- Do the same with your Push notification service and click the **Back** button.



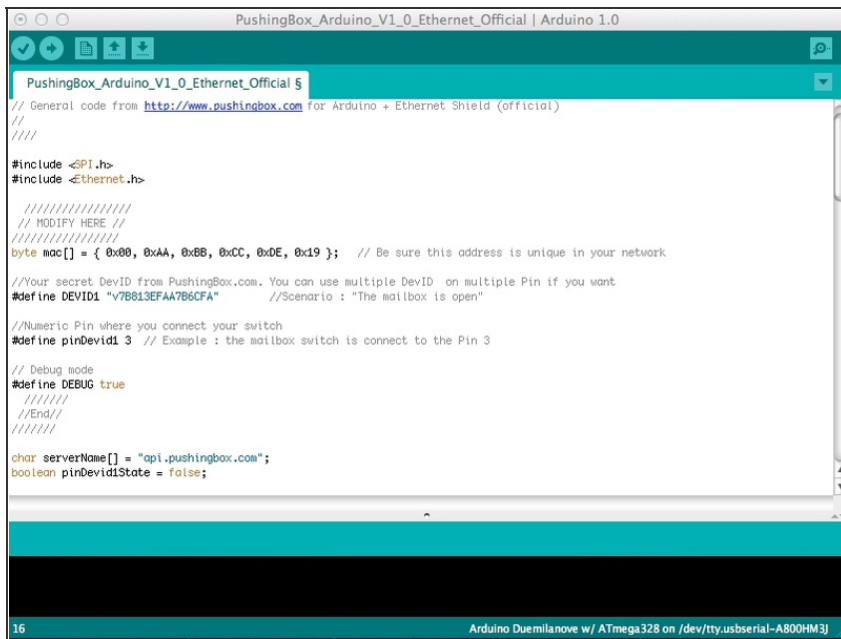
Step 10



- Your scenario is now created.
- Click on "Test" to test the scenario.
- You should receive a Push notification on your phone and an email.
- Make a note of the "DeviceID" value of this scenario. You will paste it into the Arduino code.



Step 11



- Download the Arduino source code from the PushingBox API page and open it.
- In the `#define DEVID1` line, paste the DeviceID of your scenario. Make sure you enclose it in quotes as shown.
- Compile the code and program your Arduino.
- You're done! Test it, install it on your door and enjoy! :)

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